Navy Case No. 82,222 PATENTS

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In re application of	:	
Usman A.K. Sorathia	:	
Serial No. 09/822,308	:	Group Art Unit: 1712
Filed: March 29, 2001	:	Examiner: Michael J. Feely
For: FIREPROOF PROTECTION INTEGRATING FABRICATION SYSTEM FOR COMPOSITE STRUCTURES	: : :	Confirmation No. 7684

APPEAL BRIEF

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

This brief relates to an appeal noted herewith seeking review of the Examiner's decision finally rejecting claims 17, 19 and 20.

(1) REAL PARTY INTEREST

The party of interest in the above entitled application is the United States of America as represented by the Secretary of the Navy as assignee of the entire interest in the subject invention of the above named inventor.

(2) RELATED APPEALS AND INTERFERENCES

There are no prior appeals or interferences related to this appeal.

(3) STATUS OF CLAIMS

Claims 17, 19 and 20 are presently pending and on appeal. Such claims stand finally rejected under 35 U.S.C. 102(e).

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(4) STATUS OF AMENDMENTS

Following the Final Office action dated April 9, 2003, a Rule 116 Amendment was submitted on April 25, 2003 merely proposing cancellation of claim 18 without any change to claims 17, 19 and 20 under final rejection.

(5) SUMMARY OF THE INVENTION

A concise explanation of the subject invention covered by claims 17, 19 and 20 on appeal is as follows:

The subject invention relates to fabrication of a fire protective composite structure by initial formation of a barrier layer associated therewith to be exposed to seawater environments. A fire resisting agent is infused into the barrier layer after completion of its formation An underlying substrate is attached to the barrier layer before completing fabrication of the composite structure.

According to one embodiment of the subject invention, the substrate is bonded by adhesive to the barrier layer after said formation thereof and said infusion of the fire-resisting agent. Pursuant to another embodiment, the fire-resisting agent is infused into the barrier layer during formation of the underlying substrate so as to effect attachment thereof to the barrier layer after formation thereof without use of adhesive.

(6) ISSUES

The issues presented for review in this appeal involve interpretation of the disclosure in the Day et al. patent of record to determine whether such disclosure anticipates the subject invention to which claims 17, 19 and 20 on appeal are limited. Such interpretation of the Day et al. patent disclosure is necessary since the final rejection of claims 17, 19 and 20 is predicated on anticipation under 35 U.S.C. 102(e).

(7) GROUPING OF CLAIMS

Claim 17, 19 and 20 on appeal all relate to a process of fabricating a composite structure to be exposed to seawater environments with a fire resistant property.

(8) ARGUMENT

According to the disclosure in the Day et al. patent (paragraph 0058), infusion of fire resisting resin is performed by its impregnation into an outer skin 37 of a panel 30 as the barrier. Formation of such barrier panel 30 involves bonding of the outer skin 37 to inner skins 36 of the panel 30 by placement within a closed vacuum evacuated mold within which the resin impregnation is performed. Thus, according to the disclosure in the Day et al. patent resin infusion is performed before formation of the panel 30 is completed upon withdrawal thereof from the mold with its outer skin 37 bonded to the inner skins 36.

In contrast to the latter referred to portion of the disclosure in the Day et al. patent, related to barrier panel formation and fire-resisting resin infusion, each of claims 17, 19 and 20 specifies: "b) introducing a fire resisting agent into the barrier after said forming thereof". On this account alone, the disclosure in the Day et al. patent does not anticipate the subject invention limited by the latter quoted recitation in each claims 17, 19 and 20, because resin infusion is effected before barrier formation is completed according to the Day et al. patent.

CONCLUSION

By reason of the factual evidence hereinbefore pointed out with respect to the disclosure in the Day et al. patent, such disclosure does not anticipate the subject invention to which claims

17, 19 and 20 on appeal are limited. The final rejection f the claims on appeal under 35 U.S.C. 102(e) should therefore be reversed.

Respectfully submitted,

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(9) APPENDIX

The claims on appeal are as follows:

17. In a process for protective fabrication of a composite structure to be exposed to seawater environments, the improvement residing in a sequence of steps including: a) forming a barrier; b) introducing a fire resisting agent into the barrier after said forming thereof: c) forming a substrate; and d) attaching the barrier to the substrate in underlying relation thereto before completing the fabrication of the composite structure; wherein said introducing of the fire resisting agent comprises: infusion into the barrier.

19. In a process for protective fabrication of a composite structure to be exposed to seawater environments, the improvement residing in a sequence of steps including: a) forming a barrier; b) introducing a fire resisting agent into the barrier after said forming thereof: c) forming a substrate; and d) attaching the barrier to the substrate in underlying relation thereto before completing the fabrication of the composite structure; wherein said attaching of the barrier to the substrate is performed by providing an adhesive between the barrier and the substrate.

20. In a process for protective fabrication of a composite structure to be exposed to seawater environments, the improvement residing in a sequence of steps including: a) forming a barrier; b) introducing a fire resisting agent into the barrier after said forming thereof: c) forming a substrate; and d) attaching the barrier to the substrate in underlying relation thereto before completing the fabrication of the composite structure; wherein said introducing of the fire resisting agent is performed by infusion thereof into the barrier during said forming of the substrate to effect said attaching of the barrier to the substrate without using an adhesive.